

## REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Rejections of Claims 1-3 and 5-9 Under 35 USC §102(b), and Claim 4 Under 35 USC §103(a), in view of U.S. Patent No. 4,005,571 (Wolff)

This rejection is again respectfully traversed on the grounds that the Wolff patent fails to disclose or suggest a countdown time that counts down to a next integral time point selected from a plurality of predetermined integral time points, as recited in claim 1, by calculating the difference between the current time and the next integral time point.

It appears that the Examiner has mis-understood our arguments concerning the Wolff patent, which were not simply that the claimed invention involves minute or hours rather than days, but rather that the claimed invention counts to a **NEXT** hour, half-hour, quarter hour, whereas Wolff counts down to a set date.

Consider the following example:

The claimed invention permits selection of a next hour, half-hour, or quarter-hour, then counts down to that time. If the “**hour**” time point is selected, for example, and time is **2:32**, then the claimed invention will count down to **3:00** (the **NEXT** hour). If the time is **2:59**, the claimed invention will still count down to **3:00**. On the other hand, if the time is **3:02**, then the claimed invention will count down to **4:00**. If the quarter-hour time point had been selected, then respective count-downs for actual current times of **2:32**, **2:59**, and **3:02** would be **2:45**, **3:00**, and **3:15**. Similarly, the half-hour counts for the same current times would be **3:00**, **3:00**, and **3:30**, respectively.

The point of the arguments made in the last response is not that the invention is different because it involves hours rather than days, but because it operates in a completely different manner than Wolff, which does not count down to the next integral time period. One cannot,

using the counter of Wolff, select “month” as the integral time period and then count down to the beginning of the next month. The skilled artisan (or even an unskilled one) would not think of providing a countdown timer of the type claimed that counted down to the next month because most persons can simply look at the current date and immediately know the number of days until the start of the next month, or at least be able to figure it out within a few minutes. Providing a countdown timer of the type claimed, in which the count is to the next integral time point, that counted down to the NEXT *day* would be even more unlikely. One only needs to glance at a conventional clock to be know how long it will be to the next *day*.

The purpose of the claimed invention is that, on the scale of minutes, setting the actual time to which the counter is to count takes a relatively long time. By that time, several minutes might have passed, which could result in too long a count. According to the claimed invention, the user simply needs to press “hour,” “half-hour,” or “quarter-hour,” and the timer will start counting down. This saves a lot of trouble because there is not need to set the exact hour and minute at which time the count will end. If user presses “hour” at 3:08, then the user has obtained a 52 minute count with the press of a single button. The setting time is likely not a problem in the context of the timer of Wolff, but it is on the scale of the claimed invention.

The counter of Wolff permits a user to enter an arbitrary start date and end date, and displays the number of days to the entered date. For example, the user might enter December 25, and get a running count of the number of days until Christmas. That type of counting down to a set date makes sense on a daily scale, but it is not what the claimed invention. The claimed invention does not count down to a selected date or time. It blindly counts down to the next integral time point, *i.e.*, to the next hour, half-hour, or quarter-hour. It does not make sense, in the date calculating context of Wolff, to count down to the NEXT integral time point, whether the integral time point is a month, week, or day. Counting down to the next integral time point only makes sense if the integral time points are hours, half-hours, or quarter-hours. In that case, the user gets a count, *and yet does not need to set a specific time*.

According to the claimed invention, the user starts the countdown simply by selecting one of only three predetermined time points: 1. **Hour**; 2. **Half-Hour**; and 3. **Quarter-Hour**. The user does not select a particular hour, such as 11:00 or 1:00, but rather selects the NEXT hour, whatever that hour might be. This is completely different than the counter of Wolff, in which the user selects a **particular** day, and not just the **next** day, whatever that day might be.

Furthermore, the circuitry involved in calculating the number of days to a user-set time point is different than that involved in calculating the number time units to the **next** time point, and the resulting display is different, *whether the time units are days to a date as in Wolff, or minutes to the next hour (or half or quarter hour) as in the claimed invention*. **This is not merely a matter of optimizing time periods, as suggested by the Examiner, but a matter of qualitatively different types of countdowns, one to the NEXT integral time point, and the other to an arbitrary time point selected by the user (and which will hardly ever be the next such integral time point).**

Because the Wolff patent neither discloses nor suggests a countdown timer that counts to the **next** hour, half-hour, or quarter-hour, as claimed, it is respectfully submitted that the Wolff patent does not anticipate the claimed invention, and withdrawal of the rejection of claims 1-3 and 5-9 under 35 USC §102(b) and of claim 4 under 35 USC §103(a) is respectfully requested.

3. Rejection of Claim 10 Under 35 USC §103(a) in view of U.S. Patent Nos. 4, 005,571 (Wolff) and 4,195,220 (Bristol)

This rejection is respectfully traversed on the grounds that the Bristol patent, like the Wolff patent, fails to disclose timer that counts down to the **next** integral time point, much less one in which the **next** integral time point is either the **next** hour, the **next** half hour, or “the **next** quarter hour, rather than a settable time, as discussed above.

In addition, the Bristol patent fails to disclose a buffer that stores the selected integral time point, as recited in claim 10. Instead, the Bristol patent discloses a buffer for storing the

Serial Number 09/956,887

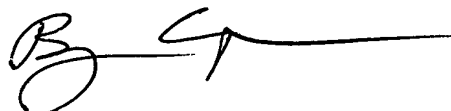
output of counters. The counters are used in an elapsed time recorder for recording the time spent on various projects. Nowhere does the Bristol patent suggest counting *down* to a next integral time point by calculating the interval between the current time and the next integral time point, much less a buffer for storing the selected integral time point in order to make the selected time available for use in calculating the countdown interval.

Accordingly, it is respectfully submitted that the subject matter of claim 10 is patentable over the proposed combination of the Wolff and Bristol patents, and withdrawal of the rejection of claims 10 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

BACON & THOMAS, PLLC

A handwritten signature in black ink, appearing to be 'B. Urcia', with a long horizontal line extending to the right.

By: BENJAMIN E. URCIA  
Registration No. 33,805

Date: June 28, 2004

BACON & THOMAS, PLLC  
625 Slaters Lane, 4th Floor  
Alexandria, Virginia 22314

Telephone: (703) 683-0500

N:\BTS\Producer\Btu\Printing A...1\FCN\CHEN956887a02.wpd